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(12) **United States Patent**  
**Prachumsri et al.**(10) **Patent No.:** **US 7,015,036 B2**  
(45) **Date of Patent:** **Mar. 21, 2006**(54) **HUMAN LIVER CELL LINE**(75) Inventors: **Jetsumon Prachumsri**, Samutprakam (TH); **Nongnuch Yimamnuaychok**, Thonburi (TH)(73) Assignee: **The United States of America as represented by the Secretary of the Army**, Washington, DC (US)

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(51) **Int. Cl.****C12N 5/08** (2006.01)**C12N 5/00** (2006.01)**C12N 1/10** (2006.01)**C12N 5/02** (2006.01)(52) **U.S. Cl.** ..... **435/370**; 435/325; 435/366; 435/373; 435/374; 435/258.2; 435/378; 435/383(58) **Field of Classification Search** ..... 435/91.1, 435/370, 258.2, 325, 366, 373, 374, 383, 435/378

See application file for complete search history.

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In this application is described the establishment and maintenance of a normal human hepatocyte cell line able to support complete development of malaria parasite development in vitro. Advantages and uses of the cell line are also described.

**12 Claims, 12 Drawing Sheets**